

**CALIFORNIA STATE LIBRARY  
METADATA STANDARDS**

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**CALIFORNIA STATE LIBRARY  
METADATA STANDARDS  
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## INTRODUCTION:

The California State Library will be undertaking a variety of digitization initiatives as part of the Library of California strategy. To provide libraries and other institutions undertaking digitization projects with guidance in developing metadata (data about the digital objects), the State Library has worked with representatives from the California library community to develop metadata standards. The adoption of the standards will:

- Provide the people of California, access to the unique resources and special collections in digital format held by California's libraries, through metadata at a level sufficient to support the identification and access needs of the digital object;
- Support future access options, including a gateway or portal for digital collections; a California union catalog of metadata; or cross database search options require broad based adoption of standards adopted by a full range of California libraries;
- Support long term management of digital assets, by including descriptive, administrative and structural metadata;
- Provide enhanced access to digital objects;
- Establish a consistent level of expectation among users; and
- Allow for local flexibility and decision making, based on the purpose of the digitization initiative, the potential users, the knowledge and expertise of the staff, and the technical infrastructure of the library.

These metadata standards do not require the adoption of a specific metadata standard. Rather the California State Library standards define one of several standards that can be adopted, along with a set of minimum elements for the digital object metadata. These standards are designed to serve a variety of purposes. They provide guidance to local institutions in the creation of metadata about their digital collections. They may facilitate future State Library initiatives, that could include a union catalog of metadata records. As the State Library's strategy for accessing digital objects evolves the standards will be reviewed and modified, as needed.

The working group used a variety of resources in developing this set of metadata standards. Special recognition is given to the California Digital Library, the Library of Congress, the Colorado Digitization Project, the University of California, Berkeley and the University of Virginia whose documents are referenced throughout this publication.

## METADATA:

Metadata is defined as 'data about data', or any data associated with a resource that describes that particular resource. It is essentially, a modern term for bibliographic information that libraries have traditionally entered into their catalogs. Metadata is most commonly referred to when discussing descriptive, administrative and functional information about digital or World Wide Web resources. Metadata should be created and associated or linked to the digital resource to support discovery, use, storage and migration of the resource. There are three conceptual types of metadata:

- *Descriptive*: used for indexing, discovery and identification of a digital resource. Standards include Dublin Core (DC), AACR-2/MARC, Government Information Locator Service (GILS), Encoded Archival Description (EAD) and Visual Resource Association (VRA)..
- *Structural*: information used to display and navigate through digital resources, including information about the internal organization of the digital resource. Structural metadata might include information on the structural divisions of a resource, such as chapters of a book.
- *Administrative*: represents the management information for the digital resource. It includes information the user may need to access and display the resource. Rights management information, which describes the copyright status and stipulates permissions needed for use, is included in this component. Administrative metadata can include the scan resolution of the image,

the hardware and software used in producing the image, compression information, pixel dimensions, etc.

Standards for the description of digital objects are developing as the World Wide Web is developing. Traditional library standards, such as AACR-2 and MARC have been adopted by some libraries, while others are experimenting with the newer standards, such as Encoded Archival Description (EAD) (<http://lcweb.loc.gov/ead/>) , Dublin Core (<http://purl.org/DC/>). Both traditional and emerging standards will continue to evolve as web-based resources expand. At the same time digital objects may have additional requirements that traditional library resources do not have. Information must be provided on the structure of the digital object to assure future use of these digital objects on yet undeveloped technology. Rights management and administrative information, not generally required for traditional print materials, must be provided for digital objects.

**Recognizing that libraries will adopt a variety of approaches, to meet their local needs, as well as the special requirements of their collections and the materials, the CSL guidelines do not recommend a single standard be adopted. Rather a set of core elements has been defined that must, as appropriate to the resource, be included in each record about a digital object or collection, regardless of the standard that is adopted, AACR/MARC, EAD, Dublin Core, VRA, etc.**

**Encoded Archival Description Metadata:** Some California libraries, including the libraries of the University of California and the California State University systems, have adopted the Encoded Archival Description (EAD) to support access to their archival collections. The EAD, a Standard Generalized Markup Language (SGML) Document Type Description, was developed at the University of California, Berkeley, as a universally accepted standard for describing archival collection. The developers felt the EAD could simplify, improve, and expand access to archival collections by making it possible to link MARC-based catalog records to finding aids. EAD would also enabled searching among distributed networked finding aids and provide keyword access to locate folders or items previously buried in container lists. These standards meet the objectives of the California State Library and can used by any library as the standard for the description of their digital objects.

*Resources:* The following resources will be useful to libraries interested in using EAD.

- California Digital Library, *Digital Image Collection Standards*:  
<http://www.ucop.edu/irc/cdl/tasw/current/current.html>
- *CIMI-Best Practices Guide: CIMI SGML DTD, 1996*.  
[http://cimi.org/downloads/CIMI\\_SGML/cimidtd.pdf](http://cimi.org/downloads/CIMI_SGML/cimidtd.pdf)
- *CIMI Briefing Paper: Options for Metadata Support, 1997*.  
<http://cimi.org/documents/metadatabrief.html>.
- *Library of Congress Encoded Archival Description (EAD) Official Web Site*:  
<http://lcweb.loc.gov/ead/>
- Research Library Group EAD support site: <http://www.RLG.org/rlgead/>
- Society of American Archivists. EAD Roundtable. EAD Help Pages:  
<http://jefferson.village.virginia.edu/ead>
- *Three SGML metadata formats: TEI, EAD, and CIMI*: a study for BIBLINK work package, December, 1996. <http://hosted.ukoln.ac.uk/biblink/wp1/sgml/>
- University of California, Berkeley. *EAD @ Berkeley*: <http://sunsite.berkeley.edu/ead/>
- University of Virginia, *Guides to Manuscripts and Archival Collections*:  
<http://etext.lib.virginia.edu/ead/eadguide.html>

**AACR-2/MARC metadata:** Some California libraries are using AACR-2 and MARC to describe their digital objects. The MARC format is regularly updated expanding and enhancing the capacity of the MARC record to support the description of digital resources. The most recent update to the 856 field, allows the MARC record to support description of digital objects, including the resource identifier, version and related resource information, and functional and administrative metadata. Several libraries are cataloging each digital object using MARC, with links to the actual digital object via a URL. Other libraries are providing MARC records for the collection level cataloging and linking to either the finding

aid on the web or to the digital object on the web via URLs. The AACR-2/MARC standards meet objectives of the California State Library and can be used by any library as the standard for the description of the digital objects.

*Resources:* The following resources will be useful to libraries interested in using MARC.

- *MARC 21 Concise Format for Bibliographic Data, Field 856:* <http://lcweb.loc.gov/marc/bibliographic/ecbdhold.html#nrcb856>.
- *Cataloging Internet Resources: A Manual and Practice Guide*, 2<sup>nd</sup> Edition, Nancy Olson, editor: <http://www.purl.org/oclc/cataloging-internet>
- *Guidelines for coding electronic resources in leader/06:* <http://lcweb.loc.gov/marc/ldr06guide.html>
- *OCLC Guidelines for Choice of Type and Blvl for Electronic Resources:* <http://www.oclc.org/oclc/cataloging/type.htm>
- *Cataloging electronic resources: OCLC-MARC coding guidelines:* <http://www.oclc.org/oclc/cataloging/type.htm>

**Dublin Core metadata:** The Dublin Core metadata standard is a set of fifteen elements used to describe a wide range of networked resources. The semantics of these fifteen elements have been established through consensus by an international, cross-disciplinary group of professionals from the library, museum, computer science, and text encoding communities, as well as from other related fields of scholarship. The Dublin Core metadata standard is moving through the international standards setting process. Dublin Core is being revised as electronic resources continue to evolve, and different communities test and begin implementing Dublin Core.

The Dublin Core metadata standard embodies the following characteristics:

- *Simplicity of creation and maintenance:* The intention of the Dublin Core element set is to remain as simple and accessible as possible, in order to allow a non-specialist to create descriptive records for online resources both easily and efficiently, while providing for optimum retrieval of those resources in an online environment.
- *Commonly understood terminology:* The Dublin Core was developed with the "non-specialist searcher" in mind. By supporting a common set of elements, the semantics of which are universally understood and supported, resource discovery across different descriptive practices from one field of knowledge to another will be increased. By using terminology that is generic yet applicable to a variety of disciplines, the visibility and accessibility of resources across these disciplines can be enhanced.
- *International in scope:* The involvement of representatives from almost every continent on the Dublin Core specifications has ensured that the development of the standard will address the multicultural and multilingual nature of networked resources.
- *Extensibility:* Although the Dublin Core element set was developed with simplicity in mind, the need for precise retrieval of resources has also been recognized. As the standard develops, the Dublin Core element set could serve as the core descriptive information that will be usable across the Internet, while also allowing other, additional elements to be added which make sense within a specific discipline. These additional element sets can be linked with the Dublin Core to meet the need for extensibility and to aid in additional resource discovery.

*Resources:* The following resources will be useful to libraries interested in using Dublin Core.

- Dublin Core Metadata Initiative: <http://purl.org/DC/>
- *A User Guide for Simple Dublin Core:* [http://purl.org/DC/documents/working\\_drafts/wd-guide-current.htm](http://purl.org/DC/documents/working_drafts/wd-guide-current.htm)

- *Minnesota Metadata Guidelines--Dublin Core: User Guide for Dublin Core Elements.* (PDF document): <http://bridges.state.mn.us/mmg-dcuserguide.pdf>
- Colorado Digitization Project. *General Guidelines for Descriptive Metadata Creation and Entry:* <http://coloradodigital.coalliance.org/glines.html>
- DeCandido, Grace Ann. "Metadata always more than you think," *PLA Technical Notes*. <http://www.pla.org/metadata.htm> July 13, 1999, revised August 3, 1999.
- Florida International University Digital Library. *Metadata Creation and Maintenance Manual:* <http://www.fiu.edu/~diglib/metadata/index.html>
- *Introduction to Metadata: Pathways to Digital Information.* Ed. Murtha Baca. Los Angeles: Getty Information Institute, 1998. 41p. \$9.95 (ISBN 0-89236-533-1). LC 98-35383
- Nordic Metadata Project. *User Guidelines for Dublin Core Creation:* [http://www.sics.se/~preben/DC/DC\\_guide.html](http://www.sics.se/~preben/DC/DC_guide.html)

**Crosswalks:** A "crosswalk" is a set of transformations applied to the content of elements in a source metadata standard that results in the storage of appropriately modified content in the analogous elements of a target metadata standard." (NISO White Paper, October 1998). A fully specified crosswalk contains a semantic mapping as well as a conversion specification. See the NISO White Paper, "[Issues in Crosswalking Content Metadata Standards](#)," for further information on a definition and specification of crosswalks.

Crosswalks provide the ability to create and maintain a set of metadata, and to map that metadata into any number of related content metadata standards. In order to build successful crosswalks and mapping schemes, it is important to maintain consistency across metadata standards.

**Commercial database software for metadata:** Some California libraries are developing their own local databases using commercial database software, such as Microsoft Access. These libraries either convert this data into an HTML format that can be accessed via their website, or used in a stand alone indexing system. Libraries using this approach are recommended to use the elements defined in this document to guide the content of their local databases. Consistent use of these elements will facilitate future applications the State Library may wish to make of this data. Those adopting this approach need to consult with the State Library on their metadata approach when applying for State Library grants.

## **RECOMMENDED ELEMENTS:**

### **Core elements:**

The working group explored a range of current and emerging standards to identify the appropriate set of core elements. The basis of the core elements for description were based the Dublin Core. To that set of core elements the working group added elements from the EAD structural and administrative components. There are a total of 16 elements, of which 8 are required, 4 are recommended and the remaining are optional depending on library need and format of the item. The eight required elements include: title (qualified), creator, description (qualified), identifier, publisher, digital date, original date (qualified), format. The recommended elements include: subject, type, source, and language. The remaining elements are optional, but desirable. In addition to the elements, the records also have qualifiers, modeled after the Dublin Core qualifiers. The *modifier* qualifier refines or specifies the meaning of the content of the element, for example it indicates that the name in the Contributor element is the illustrator. The *scheme* qualifier defines rules for formatting or contains controlled vocabulary source information. The purpose of scheme is to introduce some degree of consistency and standardization in subject terminology.

### **Subject terminology/controlled vocabularies:**

It is recommended that the library provide subject access to the digital object and that the term be selected from a controlled vocabulary. Using terminology from a subject heading list or thesauri ensures consistency and improves the quality of the search results. In addition to subject terms, classification numbers can be added to the record. Additional keywords terms can be added to the record.

These standards recommend using controlled vocabulary from commonly recognized thesauri or subject heading lists, such as the Art and Architecture Thesaurus or the Library of Congress Subject Heading List. If a classification number is provided, enter both the number and the term found in the scheme in separate fields. These standards recommend using established classification scheme, such as the *Dewey Decimal Classification* or the *Library of Congress Classification Scheme*.

When using keyword or uncontrolled vocabulary, terms should be taken from the digital object or sources that describe the original.

*Resources:* The following are references/links to several national or international controlled vocabularies:

- *Library of Congress Subject Heading List.* Available online from OCLC, RLG and in hardcopy
- Medical subject Headings (MeSH): <http://www.nlm.nih.gov/mesh/meshhome.html>
- *Art and Architecture thesaurus:* [http://shiva.pub.getty.edu/aat\\_browser/](http://shiva.pub.getty.edu/aat_browser/)
- *Union List of Artists Names:* [http://shiva.pub.getty.edu/ulan\\_browser/](http://shiva.pub.getty.edu/ulan_browser/)
- *Thesaurus of Graphic Names:* [http://shiva.pub.getty.edu/tgn\\_browser/](http://shiva.pub.getty.edu/tgn_browser/)
- *Thesaurus of Graphic Materials I:* <http://lcweb.loc.gov/rr/print/tgm1/toc.html>
- *Thesaurus of Graphic Materials II:* <http://lcweb.loc.gov/rr/print/tgm2/>
- IEEE Approved indexing list: <http://robot0.ge.uiuc.edu/~spong/test/keyword/>
- Astronomy Thesaurus: <http://www.sti.nasa.gov/thesfrm1.htm>
- *Triton: Taxonomy Resource & Index to Organism Names.*  
<http://www.york.biosis.org/triton/triton.htm>
- *Web Thesaurus Compendium:* <http://delite.darmstadt.gmd.de/~lutes/thesalpha.html>
- *Dewey Decimal Classification.* Available in hardcopy and CD Rom from OCLC Forest Press
- *Library of Congress Classification.* Available in hardcopy and CD Rom from LC.

## TITLE

**Label:** Title

**MARC Maps to:** 245: :|a, 24x

**Definition:** Name given to the resource by the creator or publisher; may also be identifying phrases or name of the object supplied by the agency

**Mandatory:** Yes, if one exists. Transcribe title, if there is one, from the physical copy of a resource, or enter title assigned by agency, or found in reference sources.

If there is no title, enter a generic name or descriptive statement used to identify the resource in the title element. Optionally enter this information in the Descriptive element.

**Repeatable:** Yes. Enter more than one title if necessary for access (i.e. caption title, former title, spine title, collection title, series title, artist's title, etc.) or if in doubt about what constitutes the title.

**Modifier:** None

**Scheme:** Follow AACR2, AAPM, CDWA, VRA, or other established cataloging rules or use Freetext.

### Input Guidelines:

1. Transcribe titles and subtitles from the source using the same punctuation that appears on the source. Include initial articles in the title.
2. If multiple items have been assembled into one record, create a collected title that is descriptive as possible of the contents. Enter item level titles in the Relation field. Optionally the institution may create individual records for each item. In that case, enter the title in the title field and add the collective title in the Relation Element.

### Examples:

*[Titles created by creator/publisher]:*

The Great Gatsby

HAL's legacy: 2001's computer as dream and reality

Annie Hall

Map of Los Angeles County

Symphony no. 3, A major, opus 56

A View of the Golden Gate Bridge (photo caption)

*[made up title]:*

The Flannery O'Connor Papers (correspondence, papers, etc. of Flannery O'Connor)

A View of the Brooklyn Bridge (photograph of the Brooklyn Bridge)

Venus and Cupid (sculpture of Venus and Cupid)

A Rolltop desk (a desk with a top that rolls up and down to cover it)

Portrait of Thomas Jefferson (painting of Thomas Jefferson)

A Ceramic fruit bowl (a ceramic bowl used to hold fruit)



## CREATOR

**Label:** Creator

**MARC Maps to:** 1xx, 7xx

**Definition:** Person/s or organization/s primarily responsible for creating the *intellectual* content of the resource. For example, the author of written documents; artists, photographers, potter, the collector of natural specimens or artifacts, or illustrators of visual resources.

**Mandatory:** Yes, if known. If the name is unknown, leave the element blank.

**Repeatable:** Yes. Enter more than one creator if necessary for access (i.e., author, agency, corporate entity) in the order they appear or the order of importance.

**Modifier:** Personal name; or, Corporate name.

**Scheme:** Follow AACR2, APPM, CDWA, VRA or other standard cataloging rules.

### Input Guidelines:

1. Enter personal names in inverted form: Surname/s, first name, middle name or initial, suffix, prefix. If a name consists of several parts, select the element normally used in authority lists, or enter it as it would be in the country of origin. Birth and death dates, if known, should be added, in accordance with authorized form of the name if such is used.
2. Enter corporate names in full, direct form. In the case of a hierarchy, list the parts from the largest to smallest, separated by periods.
3. If there is doubt as to how to enter a name, personal or corporate, enter as it appears and do not invert.
4. Use of authority files, such as the Library of Congress Name Authority File, is recommended.

### Examples:

[*Personal Names*]:

Mozart, Wolfgang Amadeus, 1756-1791.  
Sawka, Jan, 1946-  
Toulouse-Lautrec, Henri de, 1864-1901  
Jeanne-Claude, 1935-  
Brown, Jerry  
Park Chung Lee

[*Corporate Names*]:

Ty, Inc.  
Berkeley Art Museum  
Walt Disney Company  
H. W. Wilson Company  
California. Department of Transportation

## SUBJECT

**Label:** Subject

**MARC Maps:** 6xx

**Definition:** Topic of the resource. Typically, subject will be expressed as a subject term, phrases, or keyword that describes the subject content of the resource, or terms related to significant associations of people, places, and events, or other contextual information.

**Mandatory:** Recommended

**Repeatable:** Yes

**Modifier:** None

**Scheme:** Use established subject heading lists and/or thesaurus: *Library of Congress Subject Headings* (LCSH), *Library of Congress Name Authority File* (LCNAF), *Art and Architecture Thesaurus* (AAT), *Thesaurus for Graphic Materials* (TMGI, TMGII), National Library of Medicine, *Medical Subject Headings* (MESH), ICONCLASS, etc. Formal classification schemes, such as *Library of Congress Classification*, *Dewey Decimal Classification* including the number itself or phrases from the schedules can be used. Keywords taken from the item itself or the website are also appropriate.

### Input Guidelines:

1. Subjects may come from the title or description field, or elsewhere in the resource.
2. If the subject is a person or organization, enter as outlined under Creator.
3. If using subject term, or controlled vocabulary, recommend selecting term from a commonly recognized list or thesauri.
4. If using a classification number, it should be selected from the Dewey Decimal Classification or the Library of Congress Classification. Enter the term or phrase associated with the number in the schedules in an additional Subject element. Do not enter the phrase in the same field as the number.
5. If using a keyword, use the most significant or unique words, with more general words use as necessary. Use terms found on or about the item.
6. If using multiple terms, repeat the element, do not enter multiple terms in one element.

### Examples:

[Controlled vocabulary, examples only—there may be overlap among many for certain heading types]:

Beanie babies (Stuffed animals)	[LCSH]
Deer--California	[LCSH, TGM I]
Gold Mining—California—Nevada County	[LCSH, TGM I]
Los Angeles County (Calif.)—Map	[LCSH]
Sawka, Jan, 1946-	[LCNAF]
Bookmarks	[LCSH, TGM II]
Camera obscura works	[TGM II]
Metalpoint drawings	[TGM II]
Protest posters	[TGM II]

[Uncontrolled vocabulary, Keywords]:

Horse & buggy  
Horse  
Buggy  
Saddle

## DESCRIPTION

**Label:** Description

**MARC Map to:** 5xx

**Definition:** A textual description of the content of the resource, including abstracts in the case of document-like objects or content descriptions in the case of visual resources, or other description not included in other fields.

**Mandatory:** Yes, where this element contains a description of the item, rather than using the Title element.

**Repeatable:** Yes.

**Modifier:** Abstract; Measurements; Free text.

**Scheme:** Follow AACR2, APPM, CDWA, VRA, or other established cataloging rules or create as appropriate

### Input Guidelines:

1. Where option to enter a description of the item, rather than entering a made up title in the Title element is selected, add a note that this is a description of the item.
2. Enter descriptive text, remarks, and comments about the object. This information can be taken from the item, or provided by the record creator.
3. Enter other specialized information not included in other fields, e.g., measurements of a depicted object, description, provenance (if desired), technique, distinguishing features, inscriptions, condition, or the history of the work.

### Examples:

*[Abstract/Description]:*

A collection of 225 photos from the California State Library Sesquicentennial Celebration, 1999  
17<sup>th</sup> -18th century Chinese chair.

Round-back chair [quanyi, yuanyi]

41 in (h) x 24.5 in (w) x 19.24 in. (d)

Zitan (type of wood)

Black and white photograph of horse and buggy, in front of the J.C. Penney store, Sacramento, California, ca. 1901.

Print, photographic, black and white; subject, a woman and a child in a horse-drawn buggy, identified on back as Mrs. Merrick and Charlotte, at Lake Tahoe.

*[made up title]:*

Flannery O'Connor Papers (correspondence, papers, etc. of Flannery O'Connor)

A View of the Brooklyn Bridge (photograph of the Brooklyn Bridge)

Venus and Cupid (sculpture of Venus and Cupid)

A Rolltop desk (a desk with a top that rolls up and down to cover it)

Portrait of Thomas Jefferson (painting of Thomas Jefferson)

A Ceramic fruit bowl (a ceramic bowl used to hold fruit)

## IDENTIFIER

**Label:** Identifier

**MARC Map to:** 856; 020; 022; etc.

**Definition:** String or number used to uniquely identify the resource. For networked resources: URL, URI. For other resources, unique identifiers, such as International Standard Book Numbers (ISBN), International Standard Serial Numbers (ISSN), or other formal names could appear in this element for off-line resources. Local accession numbers may be entered in this field.

**Mandatory:** Yes.

**Repeatable:** Yes.

**Modifier:** URL; ISBN; ISSN; Accession No.

**Scheme:** None

### Input Guidelines:

- 1.Default value: URL for resource being described.
- 2.For unique institutional numbers (e.g., accession numbers), precede the number with the institution's OCLC symbol, if none exist precede the number with the name of the institution.
- 3.Input ISSN, ISBN without hyphens.

### Examples:

[URL]: <http://www.loc.gov>

[ISBN]: ISBN 0304701564

[Accession No.]: Berkeley Art Museum S995.123.45633  
CPP R321.42

## CONTRIBUTOR

**Label:** Contributor

**MARC Maps to:** 1xx; 7xx

**Definition:** Person/s or organization/s not specified in a CREATOR element making significant intellectual contributions to the resource but whose contribution is secondary to any person/s or organization/s specified in a CREATOR element (e.g., editor, transcriber, and illustrator).

**Mandatory:** Optional.

**Repeatable:** Yes.

**Modifier:** Personal name; or, Corporate name AND Compiler; Collector; Editor; Illustrator; translator, etc.

**Scheme:** Follow AACR2, APPM, CDWA, VRA, or other established cataloging rules.

### Input Guidelines:

1. Enter personal names in inverted form: Surname/s, first name/s, middle name or initial, suffix, prefix. If a name consists of several parts, select the element normally used in authority lists, or enter it as it would be in the country of origin. Birth and death dates, if known, should be added, in accordance with authorized form of the name if such is used.

2. Enter corporate names in full, direct form. In the case of a hierarchy, list the parts from the largest to smallest, separated by periods.

3. If there is doubt as to how to enter a name, personal or corporate, enter as it appears and do not invert.

4. Use of authority files, such as the Library of Congress Name Authority File, is recommended.

### Examples:

*[Personal Names]:*

Jeanne-Claude, 1935-

Smith, Robert, 1922-

Park Chung Lee

*[Corporate Names]:*

Ty, Inc.

Oakland Art Museum

H. W. Wilson Company

California. Department of State

## PUBLISHER

**Label:** Publisher

**MARC Maps to:** 260: |b

**Definition:** Entity that made the digital resource available in its present form, such as a corporate entity, publishing house, museum, historical society, library or university. Information about the publisher or the original item should be entered in the Description field.

**Mandatory:** Yes.

**Repeatable:** Yes, resource may have publisher and distributor or more than one entity responsible for making the resource available.

**Modifier:** Personal name or corporate name

**Scheme:** Follow *AACR2*, *APPM*, *CDWA*, *VRA*, or other established guidelines.

### Input guidelines:

1. When in doubt, enter corporate entity as publisher and personal name as creator.
2. List multiple publishers in separate fields.
3. Enter personal names in inverted order: Surname/s, first name/s, middle name or initial, suffix, prefix.
4. Enter corporate names in full direct form. In the case of corporate name hierarchies list the parts from the largest to the smallest, separated by commas.
5. If there is doubt as to how to enter a name, personal or corporate, enter as it appears and do not invert.
6. Use of authority files, such as Library of Congress Name Authority File, is recommended.

### Examples:

#### *[Corporate Names]*

University of Virginia Press  
Keystone View Company  
Microsoft Corporation  
Berkeley Art Museum  
Tennessee Valley Authority, Division of Natural Resources  
Brooklyn Historical Society

#### *[Personal names]*

Jones, John [individual who made software available]  
Smith, Peter R. [individual who published book]

## DATE DIGITAL

**MARC Maps to:** 260: |c

**Label:** Date Digital

**Definition:** Date of creation or availability of the digital resource; may be an approximate date created by institution creating the record.

**Mandatory:** Yes.

**Repeatable:** Yes, multiple dates may be involved such as date created, date modified, date data gathered, etc.

**Modifier:**

*Creation* Date on which the resource was first created

*Current* Date on which current form of the resource was created

*Modified* Date on which resource was last modified

*ValidFrom* Date from which resource is valid

*ValidTo* Date after which resource is valid

**Scheme:** Enter freetext or ISO8601 according to the standards used to form your date

**Input guidelines:**

1. Use eight digit number in the form YYYY-MM-DD as defined in ISO 8601, <http://www.w3.org/TR/NOTE-datetime>. In this scheme the date element 1994-11-05 corresponds to November 5, 1994.
2. Enter range of dates on the same line and use a dash ( - ) to separate dates; enter dates for different purposes on separate lines; i.e. date resource brought into being and date first collected.
3. If date is uncertain, use question mark (?) to indicate agency entering record is estimating the date of creation. If the date is an approximation, precede the date with 'ca'.

**Examples:**

1999-04-04 (image of ceramic bowl created April 4, 1998)

1996 (Web site created)

1997-04-05 (Web site modified)

1998-01-02(virtual exhibit opening)

1999-11 (Website creation date shows only month and year)

1998-06-30? (estimated date of website modification)

ca 1998-07-14 (approximate date of website creation)

## DATE ORIGINAL

MARC Maps to: 260: |c

**Label:** Date Original

**Definition:** Date of creation of the original item; may be an approximate date created by agency submitting record.

**Mandatory:** Yes, where applicable

**Repeatable:** No

**Modifier:** None.

**Scheme:** Use ISO8601 standard to form the date, where possible.

### Input guidelines:

1. Use eight digit number in the form YYYY-MM-DD as defined in ISO 8601 <http://www.w3.org/TR/NOTE-datetime>. In this scheme the date element 1994-11-05 corresponds to November 5, 1994.
2. Enter range of dates on the same line and use a dash ( - ) to separate dates, without spaces; enter dates for different purposes on separate lines; i.e. date resource brought into being and date first collected.
3. If date is uncertain use question mark (?) to indicate agency entering record is uncertain of the date. If the date is approximate use 'ca' prior to the date.

### Examples:

1998 (ceramic bowl created April 4, 1998)  
1880? - 1915? (set of stereographs with no copyright date, estimate is provided)  
15<sup>th</sup> century (tapestry)  
ca 1840 (approximate date of painting)  
1999 (date of publication of book)  
1999-11 (date of publication where only year and month is known)



## RELATION

**Label:** Relation

**MARC maps to:** 787|n, 787|o, depending on how qualified

**Definition:** Relationship of this resource to a second resource plus the identifier of the second resource. This element permits links between related resources

**Mandatory:** Optional

**Repeatable:** Yes.

<b>Modifier:</b>	<i>Current resource being described:</i>
<i>IsPartOf</i>	is contained in another resource
<i>HasPart</i>	contains part of another resource
<i>IsVersion of</i>	is version, edition, or historical state of the second resource
<i>HasVersion</i>	contains version, edition, or historical state of the second resource
<i>IsFormat Of</i>	is format or mechanically reproduced representation of second resource
<i>HasFormat</i>	has format or mechanically reproduced representation of second resource
<i>References</i>	references second resource
<i>IsReferencedBy</i>	is referenced by second resource
<i>IsBasedOn</i>	is based on second resource; a performance, translation, etc.
<i>IsBasisFor</i>	is the basis for second resource; a performance, translation, etc.
<i>Requires</i>	requires second resource for functioning, delivery, content, etc.
<i>IsRequiredBy</i>	is required by second resource for functioning, delivery, content, etc..
<i>HasSource</i>	has as its source the second resource

**Scheme:** Freetext, FPI (Formal Public Identifier), ISBN, ISSN, URL, URN

### Input guidelines:

1. This element is used to describe the original source document, related to the digital version.
2. This element is used to show relationships between related resources, including parts of a whole, version, editions, items that have been converted to another format, etc.

### Examples:

<i>IsVersionOf</i>	(edition of a work)
<i>IsBased On</i>	( <i>I am a Sorcerer</i> is English translation of [is based on] <i>Yo Soy Hechicero</i> )
<i>IsPartOf</i>	(citation of article in an electronic journal including title of journal, enumeration and chronology and pagination of article; or URL that is part of a larger Web site)
<i>IsFormatOf</i>	(transformation of a dataset into an image; or describing the digital representation of an unpublished photograph )

## TYPE

**Label:** Type

**MARC maps to:** 655|a

**Definition:** Category or genre of the digital resource

**Mandatory:** Recommended

**Repeatable:** Yes, may be more than one type

**Scheme:** None

**Modifier:** Text, Image, Sound, Dataset, Software, Event, Interactive, Physical Object;

### Input guidelines:

1. Some items may involve more than one type, i.e. a manuscript collection may have text, image and sound; a virtual exhibit may be text, image, sound, and interactive, include all appropriate type information.
2. This element describes digital object type, not the original.

### Examples:

<i>Image</i>	(stereograph, photograph, painting, engraving)
<i>Text</i>	(scrapbook, diary, poem, home page, manuscripts)
<i>Sound</i>	(sound recording)
<i>Dataset</i>	(CD-ROM with astronomy observation data)
<i>Software</i>	( <i>Linkbot</i> software)
<i>Interactive</i>	(video game, virtual exhibit)
<i>Event</i>	(gallery opening)
<i>Physical Object</i>	(vase, statue, furniture, person, etc.)

## **FORMAT**

**Label:** Format

**MARC maps to:** 856

**Definition:** Data format of the resource being described. Optionally include dimensions. Used to identify the software and hardware needed to display or operate the resource.

**Mandatory:** Yes.

**Repeatable:** Yes.

**Modifier:** None

**Scheme:** Freetext

MIME (IMT) which is Internet Media Type

### **Input guidelines:**

1. Enter term freetext or MIME (IMT).
2. Assign a format from Internet Media Types (<http://www.isi.edu/in-notes/iana/assignments/media-types/media-types>) for electronic formats such as text/html, ASCII or jpeg.
3. For electronic media, describe the digital format (image/jpeg ; video/mpeg.) Do not use Format if no tools for access, display or operation, beyond the five senses, are required.

### **Examples:**

text/xml (text in xml format; MIME scheme)

Image/jpeg (photograph in jpeg format ;.MIME scheme)

CSL version

Image/gif/<http://www.dog.net/8000/gif/19909-02>

## SOURCE

**Label:** Source

**MARC Maps:** 534: :|n

**Definition:** A string or number used to uniquely identify the work from which this resource was derived, if applicable. This element includes information about the original physical resource from which the present digital resource is derived, such as an ISBN from a book or ISSN from a serial. Enter institution classification number or control number in this field, along with code for institution.

**Mandatory:** Recommended

**Repeatable:** Yes, however in general, there will only be one source from which the present digital resource has been derived.

**Modifier:** None

**Scheme:** Use a Formal Public Identifier (FPI); or use an ISBN (International Standard Book Number) or ISSN (International Standard Serial Number).

### Input Guidelines:

- 1.Limit this information to a standard international number. Optionally include, local call number, local control number, barcode or accession number. Prefer the Identifier field for local accession numbers, etc.
- 2.Put additional information about the source, including title, publisher, etc of the original in the Relation field.
- 3.Put date of the original in the Date Original element.

### Examples:

ISBN: 0446391301, [*Published book*]

RC607 .A26W574 1996 [*Call number of original print resource*]

Accession No. CPP 5346-9 [*Accession number for Pasadena Public Library, using OCLC code*]

## LANGUAGE

**Label:** Language

**MARC Maps:** 546: :|a

**Definition:** Indicates the language/s of the intellectual content of the resource. This implies the language/s in which a text is written or the spoken language/s of an audio or video resource. Visual images do not usually have a language unless there is significant text in a caption or in the image itself.

**Mandatory:** Recommended. We recommend supplying the language data, including resources in English, to facilitate resource discovery.

**Repeatable:** Yes. Repeat element if more than one language.

**Modifier:** None

**Scheme:** Adhere to the RFC 1766 standard for languages (a two-letter code).

### Input Guidelines:

1. The content of the Language field should be taken from RFC 1766 <http://ds.internic.net/rfc/rfc1766.txt>, which include two-letter tags for the identification of languages (taken from the ISO 639 standard). Optionally RFC allows two letter country codes to be added to the two letter language code, taken from the ISO 3166 standard. For example 'en' for English, 'fr' for French, optionally 'en-uk' for English used in the United Kingdom.
2. If a textual description is necessary to describe the nature of language in the resource, include this in the Description field (e.g., German with English translations in parallel columns).
3. If the item is in two languages, use separate, repeatable elements to reflect the two languages. Do not put both in one element.

### Examples:

fr [*French*]

For item in two languages: en[English]  
fr [French]

optionally:

en-us for English used in the United States

## COVERAGE

**Label:** Coverage

**MARC Maps:** 654: :|a (*spatial*); None (*temporal*)

**Definition:** Describes the spatial or temporal characteristics of the intellectual content of the resource. Spatial or geographical coverage refers to the location/s covered by the intellectual content of the resource (i.e., longitude and latitude; celestial sector; or place names) NOT the place of publication. Temporal coverage refers to the chronological time period covered by the intellectual content of the resource (i.e., Jurassic; 1900-1920), NOT the publication date. Temporal coverage is usually expressed as a range, with a beginning and ending date.

**Mandatory:** Optional. It is recommended that the Coverage field is used to express spatial coverage when indexing map and map resources, OR if the physical region, place name(s), or time period cannot be adequately expressed in the Subject field.

**Repeatable:** Yes. List all places, physical regions, dates, and time periods associated with the intellectual content of the resource. No hierarchy is implied.

**Modifier:** Spatial, describing some sort of spatial information from the set chosen from the schemes above, OR Temporal, describing a date/time range according to accepted standards and controlled vocabularies.

**Schemes:** Use freetext to provide a textual description of the coverage of the resource; use Latitude/Longitude coordinates, with the modifier “spatial”; or use an Ordnance Survey National Grid Reference (OSGB). Recommend entering eight digit number in the form YYYY-MM-DD as defined in ISO 8601, <http://www.w3.org/TR/NOTE-datetime>. For example, the date element 1994-11-05 corresponds to November 5, 1994. Use terms from a subject heading list or thesaurus for recording time periods.

### Input Guidelines:

1. Select terms from a subject heading list or thesaurus to identify place names (i.e., Getty Thesaurus of Geographical Names, Library of Congress Subject Headings, etc.)
2. Use freetext to input B.C.E. dates.
3. Enter range of dates on the same line and use a dash ( - ) to separate dates.
4. Some time periods are not adequately described using a date format, such as Jurassic Period or the Dark Ages. In this case, give the text form of the time period (i.e. Jurassic Period.) Select terms from a subject heading list or thesauri to identify these time periods (i.e. Library of Congress Subject Headings).
5. If date is uncertain use question mark (?) following the date to indicate it is an approximate date. If the date is estimated, use 'ca' prior to the date to indicate estimation.
6. It is important to make the distinction between temporal Coverage, Source Date, and Date. For example, the temporal coverage of a photograph of an art object is the date of the art object, and the date of the photograph is the Date Original. The date the photograph was digitized is the information entered into the Date Digital element.

### Examples:

1776-07-04 [ <i>Date</i> ]	Upstate New York [ <i>Place name</i> ]
Colonial America [ <i>Time Period</i> ]	Paris [ <i>Place name</i> ]
96 B.C.E. [ <i>Freetext B.C.E. date</i> ]	
E 79°-E 87°/N 25°-N 12° [ <i>Latitude and Longitude coordinates</i> ]	
1900-1901 [ <i>Date range</i> ]	Ming [ <i>Time Period</i> ]
15 <sup>th</sup> century [ <i>Time period</i> ]	ca 1840 [ <i>Date</i> ]
North America [ <i>Place name</i> ]	

## RIGHTS MANAGEMENT

**Label:** Rights Management

**MARC Maps:** 506: :|a

**Definition:** The content of this element is intended to be a rights management or usage statement, a URL that links to a rights management statement, or a URL that links to a service providing information on rights management for the resource. A rights management statement may contain information concerning accessibility, reproduction of images, copyright holder, restrictions, securing permissions for use of images, etc.

**Mandatory:** Optional. Absence of a rights management statement does not imply the resource is not protected.

**Repeatable:** Yes.

**Schemes:** None

**Modifiers:** None

**Input Guidelines:**

1. At present, enter either a textual statement or a URL pointing to a rights management statement for digital resources on the Internet. This statement can be a general copyright statement for the institution, for the whole collection, or a specific statement for each resource. The statement should be a complete statement, specifying the copyright holder of the work/s.
2. Make sure that the rights management statement corresponds to the digital resource; for example, do not link to a copyright statement for the original resource.

**Examples:**

<http://www.college.edu/copyright.html> [*URL link to a rights statement*]

Licensed for private home viewing only. Any public performance, copying, or other use is strictly prohibited. [*Statement applying to a videotape*]

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The Copyright Law of the United States (Title 17, United States Code) governs the making of photocopies or reproductions of copyrighted materials. The Library reserves the right to refuse photocopying or reproducing an image if, in its judgment, the reproduction would be used for purposes other than personal or private scholarship, use, or research. If a user employs a photocopy or reproduction for purposes in excess of fair use, that user may be liable for copyright infringement. [*Rights management statement*]